

Evaluation of fungitoxicity of *Ipomea* against some important fungal pathogen

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ABSTRACT : The present study during 2011-12 and 2012-13 was successful an endeavor to investigate the anti-fungal activity of *Ipomea* leaf extracts under four forms viz., crude (10%), powder (10%), boil (10%) and ethanol (1%) against test fungus viz., *Rhizoctonia solani*, *Phoma sorghina*, *Colletotrichum gleosporioides*, *Fusarium oxysporium* f.sp. *pallidroseum*, *Fusarium oxysporium* f.sp. *ciceri*, *Rhizotonia bataticola*, *Sclerotium rolfsii*, *Sclerotinia sclerotiorum*, *Alternaria solani* and *Alternaria alternata*. The boil extract @ 10% was found more effective than powder, crude and ethanol extracts against five fungal pathogens viz. *Rhizoctonia solani*, *R. bataticola*, *Sclerotium rolfsii*, *Alternaria solani* and *A. alternata*, *Phoma sorghina*, *Colletotrichum gleosporioides*, *Fusarium oxysporum* f.sp. *ciceri* and *F.o.* f.sp. *pallidroseum* are controlled effectively by crude extract. The affectivity of extracts was gradually increased with the increase in the concentration 15 to 20%. Rather carbendazim (0.1%) and mancozeb (0.2%) were found more effective than the *Ipomea* leaf extract (boiled/ crude/ powder) up to the concentration of 20%. Therefore Extracts are more effective under higher concentration therefore in the direction of eco-friendly management the plants are the richest source of organic chemicals on earth and they are claimed to produce a wide variety of secondary metabolites which are used as defensive weapons. The importance of research on several products other than plant protection chemicals have been realized in recent years due to the hazard of toxic chemical to human beings and animals. Botanicals have a great potential for used as botanicals fungicides without any adverse effect on the environment for the management of above fungal pathogens

Key Words : Leaf, crude, ethanol extracts, test pathogen, chemicals, antifungal activity.